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Conference Abstract

Introduction to 3D Imaging Using Photogrammetry

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Abstract

This full day workshop will provide an introduction to 3D imaging using photogrammetry. The course is designed for museum professionals who are already familiar with using digital single lens reflex (DSLR) cameras, and want to extend their practice to 3D imaging.

Photogrammetry is a low-cost-of-entry 3D imaging method which can be used to produce excellent results for many different museum specimens, and scales well. From large buildings to tiny clay molds, photogrammetry has been used to successfully model and document a very wide variety of museum material in full color and in three dimensions. The technique can also be extended to multi-spectral imaging.

The workshop will be hands-on and will cover camera setup, lighting, and image processing, imaging flat and contoured specimens. We will look at working at different scales, and metric photogrammetry using Agisoft Photoscan.

The course will be led by a museum professional with five years of experience of using photogrammetry to image museum collections from bivalves and taxidermy to textiles, and fossils to furniture. Due to the intensive and fast-moving nature of the workshop, participation is limited to eight people. Participants will be expected to bring a DSLR and a laptop computer to the workshop.

Keywords

3D imgaging, photogrammetry

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